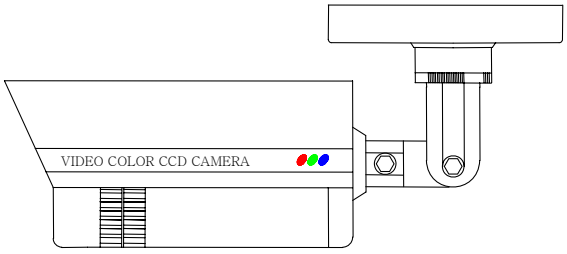
USER'S MANUAL

IR DAY/NIGHT CAMERA
DC 5~50mm LENS
WEATHERPROOF / BUILT-IN LEDS & PHOTO CELL
ALL CONTROLS ARE EXTERNAL ALLOWING
THE CAMERA TO REMAIN FACTORY SEALED
SPLIT GLASS TECHNOLOGY AVOIDS IR REFLECTIONS



INDEX

- PACKAGE CONTENTS ---------- 1
- PRECAUTIONS ---------- 2
- PRODUCT FEATURES ---------- 3
- CAMERA INSTALLATION ---------- 4
- FOCUSING ---------- 5
- DESCRIPTION OF OPERATION---------- 6~7
- CAMERA PARTS ---------- 8
- REAR SWITCHES ---------- 9~13
- DIMENSION ---------- 14
- SPECIFICATION ---------- 15
- WARRANTY ---------- 16

PACKAGE CONTENTS

*** DC 5~50mm version**

1 - CAMERA

1 – SUNSHIELD

ACCESSORIES:

4 - MOUNTING SCREWS
1 – M4 STAND CONTROL WRENCH
1 – M2.6 WRENCH FOR BACK COVER
1 – M1.25 WRENCH FOR ZOOM & FOCUS
1 - VIDEO TEST CABLE
1 – POWER CABLE

PRECAUTIONS

- **INSTALLATION SHOULD BE PERFORMED BY QUALIFIED PERSONNEL**

- **PLEASE USE A UL APPROVED REGULATED 24 VOLT AC OR 12 VOLT DC POWER SUPPLY**

- **PLEASE USE APPROPRIATE LOW VOLTAGE POWER CABLE TO PREVENT FIRE OR ELECTRICAL SHOCK.**

- **PLEASE INSURE THAT YOUR INSTALLATION AREA CAN SUPPORT THE WEIGHT OF THE CAMERA.**

- **PLEASE HANDLE THIS CAMERA CAREFULLY:**
  - DON'T USE A STRONG OR ABRASIVE DETERGENT WHEN CLEANING THE CAMERA.
  - USE A SOFT TISSUE OR LENS CLOTH TO CLEAN THE FRONT GLASS
  - DON'T EXPOSE THE CAMERA TO DIRECT SUN

PRODUCT FEATURES

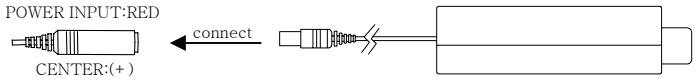
- Weatherproof sunshield
- Rear panel controls (BLC, ELC, F/L, L/L)
- Dual Voltage operation
- 1/3" Sony CCD
- Turbo AGC
- External lens control of zoom and focus
- Split glass technology eliminates IR reflections
- Video test connector for easy installation
- Lux level dip switch for day/night functions
- UTP terminal built-in for use with twisted pair wiring

Note : specifications are subject to change without notice

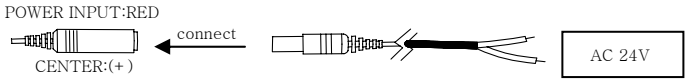
CAMERA INSTALLATION

CONNECTIONS:

1. WHEN USING 12 VOLTS DC (constant voltage 600 mA)
-CONNECT POWER TO THE DC JACK



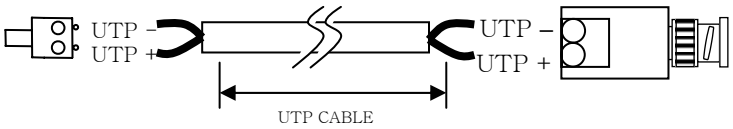
2. WHEN USING 24 VOLTS AC
-CONNECT ACCESSORY CABLE TO THE DC JACK AND CONNECT AC 24V TO THE LEAD



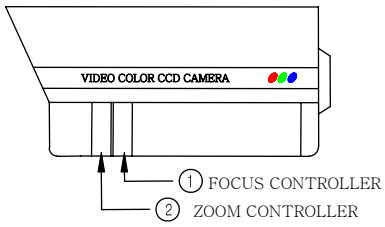
3. CONNECT VIDEO CABLE
-CONNECT BNC CABLE TO THE BNC JACK.

NOTE:ALL CONNECTIONS CAN BE MADE DIRECTLY TO THE PCB IF DESIRED

4. OPTIONAL USE OF UTP OUTPUT
-ALLOWS USE OF THE CAMERA WITH CAT-5E OR UTP CABLE. A RECEIVING BALUN MUST BE USED ON THE MONITOR SIDE. PLEASE SEE OUR MODEL VID-UTP.



FOCUSING



1. SET THE FOCUS BY USING THE FOCUS CONTROLLER.

2. SET THE ZOOM OR FIELD OF VIEW BY USING THE ZOOM CONTROLLER (5-50mm)

3. LOCK BOTH RINGS INTO POSITION USING THE SET-SCREWS.

Description of operation, wiring diagram

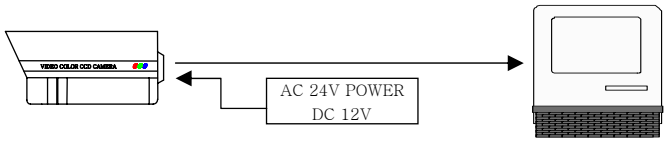
How to operate

1. SET THE DISTANCE AND FOCUS BY CONTROLLING THE ZOOM AND FOCUS RINGS.

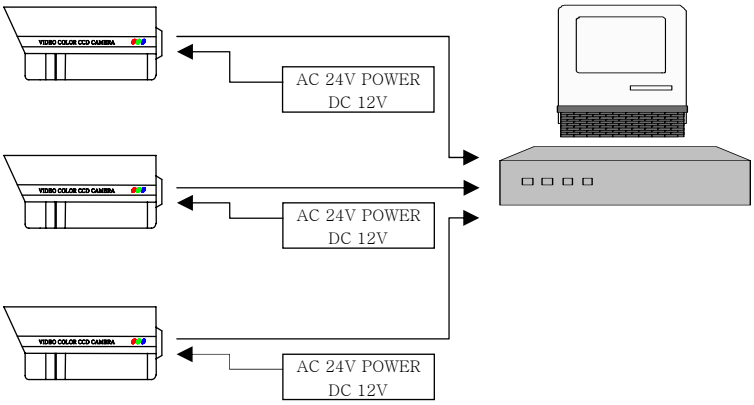
2. CONNECT THE VIDEO AND POWER CABLES

How to connect

1. Single system

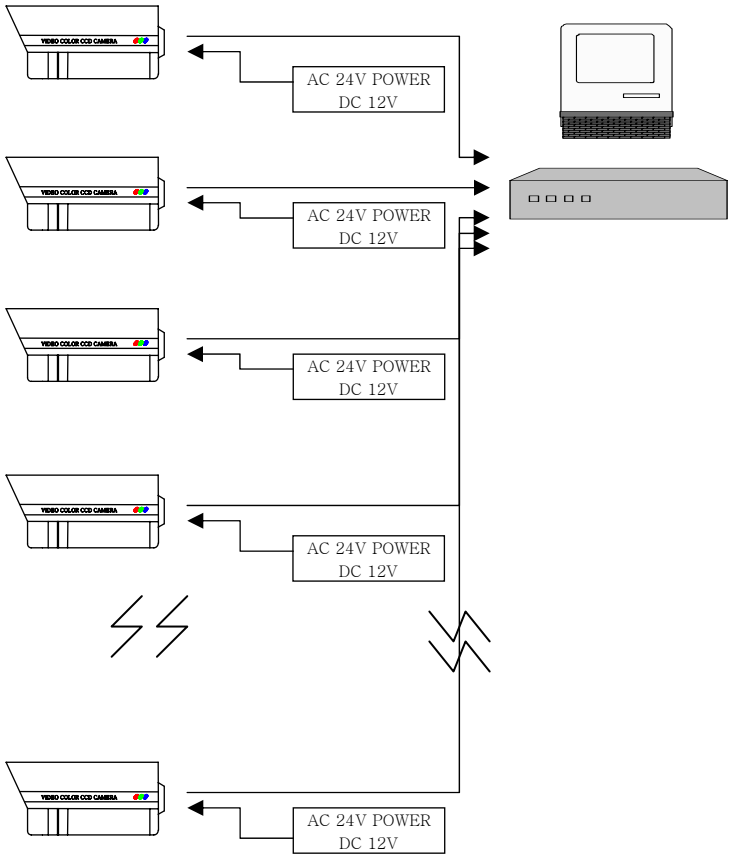


2. Multiple Camera System

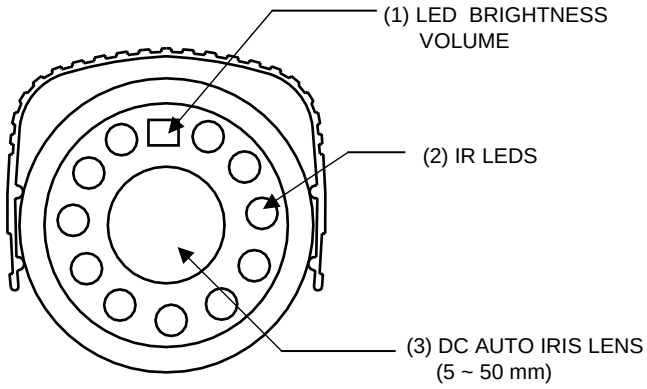


Description of operation, wiring diagram

3. DVR system



CAMERA PARTS



(1)LED BRIGHTNESS VOLUME

CONTROLL THE BRIGHTNESS OF LED

(2) IR LED'S

INFRARED LED'S ACTIVATE AS NEEDED

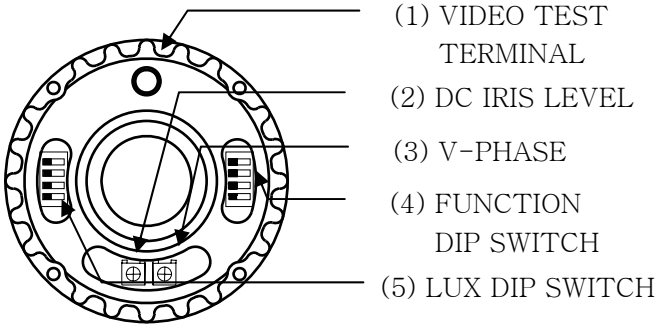
(3) DC AUTO-IRIS 5~50MM

ADJUST BETWEEN T←→W (TELE ←→ WIDE) TO SET THE FIELD OF VIEW (FOCAL LENGTH)

SET THE FOCUS BY ADJUSTING ∞←→N

NOTE: BOTH OF THE ABOVE ADJUSTMENTS GET LOCKED INTO POSITION THROUGH THE USE OF "SET-SCREWS".

REAR SWITCHES



REMOVE THE REAR COVER SCREWS TO GAIN ACCESS:

(1) VIDEO TEST TERMINAL

ALLOWS THE CONNECTION OF A LOCAL MONITOR TO MAKE INITIAL ADJUSTMENTS TO THE CAMERA

(2) DC IRIS LENS LEVEL

FINE TUNE THE AUTO IRIS LENS

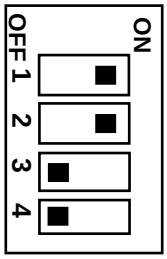
(3) V-PHASE LEVEL

WHEN DESIRED, THE VERTICAL PHASE MAY BE ADJUSTED TO SYNCHRONIZE THE VERTICAL PHASE OF THE CAMERA WITH OTHER CAMERAS IN THE SYSTEM. THIS FEATURE IS ONLY AVAILABLE IN 24 VOLT AC OPERATION.

REAR SWITCHES

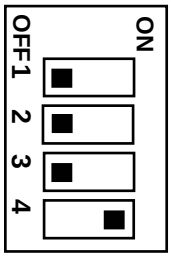
- Default setting-The Function selection switch is factory set as below

(4) Function DIP SWITCH



1.ELC
2.BLC
3.F/L
4.L/L

(5) LUX DIP SWITCH

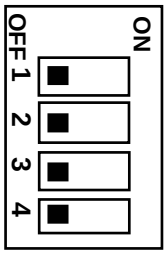


1 STEP
2 STEP
3 STEP
4 STEP

REAR SWITCHES

Switch Mode Function

*** DIP SWITCH**



1.ELC
2.BLC
3.F/L
4.L/L

1. ELC- Electronic Light Compensation.

ON : Camera is in Electronic Shutter Mode

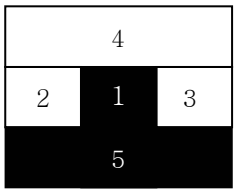
OFF: Electronic Shutter is fixed at 1/60 and Auto Iris mode is active

REAR SWITCHES

2. BLC-Back light compensation.

-BLC ON/OFF FUNCTION

BLC: If there is a strong light behind an object
the object may appear as a shadow.
Activating the BLC will minimize this effect.
The Coverage of the BLC is center plus bottom as below.



1=FIX

3. F/L- Flicker-Less

-F/L ON/OFF FUNCTION

ON : Use when the lux changes often

OFF: Use under normal circumstances

4. L/L- Line Lock

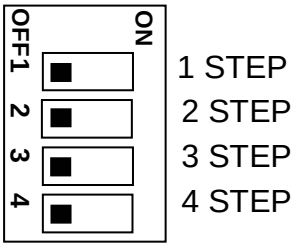
- L/L ON/OFF FUNCTION

- Locks the camera to the 60 Hz of the wall outlet.

- Only operates in the 24 Volt AC mode

REAR SWITCHES

*** LUX DIP SWITCH**

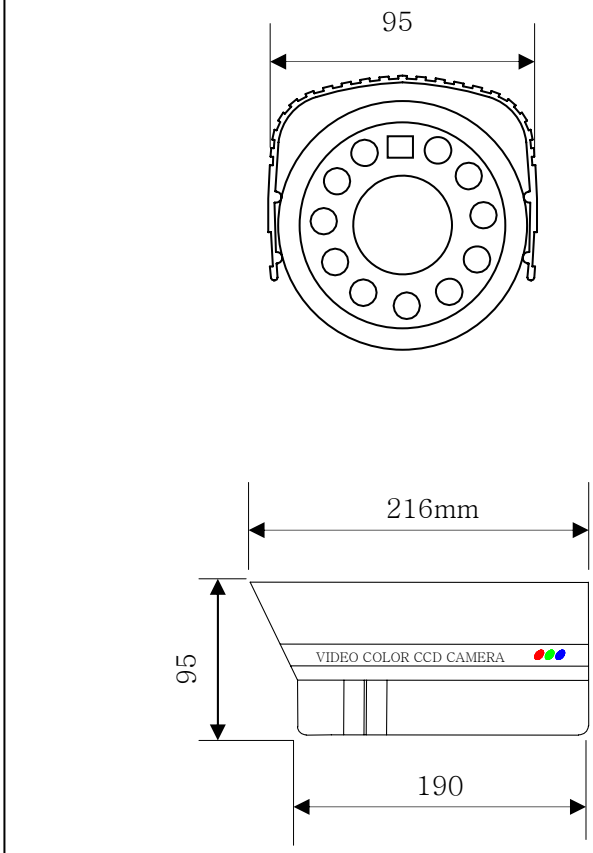


. LUX DIP SWITCH.
Tells the camera when to switch to the B/W night mode.

Note: Only one switch can be in the "on" position at a time.

#1 - The camera will switch at 1/2 lux
#2 - The camera will switch at 1 lux
#3 - The camera will switch at 3 lux
#4 - The camera will switch at 5 lux

DIMENSION



SPECIFICATION

IMAGE SENSOR	1/3" SONY EX-VIEW CCD, SUPER-HAD CCD
TV SYSTEM	NTSC , PAL
SCANNING SYSTEM	2:1 INTERLACE
SYNC SYSTEM	LINE LOCKED / ADJUSTABLE V-PHASE LINE LOCK / INTERNAL
RESOLUTION	270K : 420 LINES 410K : 480 LINES
MINIMUMILLUMINATION	0.1 LUX (SH) 0.03 LUX (EX)(IR OFF) - 0.00 LUX (IR ON)
PHOTO CELL	PHOTOCONDUCTIVE CELLS ADJUSTABLE
S/N RATIO	MORE THAN 60dB
VIDEO OUTPUT	1.0 Volt p-p 75 ohm COMPOSITE
ELECTRONIC SHUTTER	NTSC 1/60 to 1/100,000 sec , PAL 1/50 to 1/100,000 sec
POWER REQUIREMENTS	DUAL VOLTAGE 24 VOLTS AC & 12 VOLTS DC
POWER CONSUMPTION	600 mA
LENS	DC AUTO IRIS VARIFOCAL LENS (5mm-50mm)
OPERATIONAL TEMPEATURE	-20 deg F to +122 deg F – RH 95%
STORAGE TEMPEATURE	-30 deg F to +140 deg F
WEIGHT	1900 grm

MEMO

VER. 060901

This manual is based on the date as shown in the right and specifications are subject to Change without notice for quality improvement.